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## ABSTRACT

While it is clear that health status is important in determining morale, and that social contact also contributes to morale, the interaction of health status and social contact on morale is not well understood. Elderly frail community residents (N=40) were interviewed twice in a 1-year period about their contact with friends, grandchildren, siblings, and other family members, and about their desire for more contact with these people, in an attempt to understand the relationship between initial health status, change in health status, and social contact. The relationship of health status change and social contact to morale scores on the Bradburn Affect Balance Scale was also examined. Results from Time 1 and Time 2 interviews showed that changes in objectively and subjectively defined health status were associated with different social contact patterns, but not with levels of morale; subjects showing an increase in number of health conditions reported more contact with their children at Time 2. Declines in subjective health ratings were correlated with less actual, but more desired, contact with friends, while declines in objective health correlated with less desire for contact with friends. Both actual contact and desire for more contact were related to morale at the second time of measurement. (NRB)

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# Changes in Health, Social Contact and Morale in Aged

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This study was concerned with how changes in health status over time affected patterns of social contact and sense of morale in the aged. Several studies (Edwards & Klemmack, 1973; Glenn & McLanahan, 1981; Larson, 1978) have examined the relationship between frequency and availability of social interaction and morale in the aged. While families have been documented to provide much social support for the ill elderly (Shanas, 1979; Treas, 1977) there appears to be little association between family contact and morale. However, morale and contact with friends appears to be related. How this association occurs is not well understood although Lowenthal & Haven (1968) hypothesized that the quality of social interactions, be they among family or friends, is more important than the quantity of interaction when predicting life satisfaction or morale.

In a related study, Ward, Sherman & La Gory (1983) suggested that subjective assessment of social ties may moderate the relationship between social contact and morale. In other words, older persons' interpretation of their social interactions may be more important than objective counting of social contacts in determining their level of morale. Ward et al. found that subjective quality of social relationships which they operationalized as satisfaction with amount of contact with family members, was more important in predicting morale than objective quality.

Liang, Dvorkin, Kahana & Mazian (1980) also hypothesized

that individual well-being or morale was affected by subjective ratings of social integration. Their work is significant in that the authors also addressed the importance of variables of health, financial satisfaction and education in mediating this relationship. Using causal modeling Liang et al. demonstrated that health status directly influenced morale and that the relationship between objective social integration and morale is mediated by subjective social integration. Further, they also found a relationship between health and subjective social integration.

Thus, while it is clear that health status is important in determining well-being or morale, and that social contact (most notably perceptions of adequate social contact) also contributes to morale, the interaction of health status and social contact on morale is not well understood. Furthermore, little is known about how changes in health status over time are related to changes in social contact and sense of morale.

The purpose of the present investigation was twofold. Using data from two times of measurement, first, the effects of health status change on objective and subjective patterns of social contact were examined. Older individuals were asked about their contact with friends, grandchildren, siblings, and other family members and about their desire for more contact with these people in an attempt to understand the relationship between initial health status, change in health status, and

social contact. Second, the relationship of health status change and social contact to morale was examined. Morale was measured by scores on the Bradburn Affect Balance Scale at the second time of measurement.

It was hypothesized that a change in health status would be related to a change in objective contact patterns, with children (or other relatives) being seen more and friends being seen less. Related to this first prediction, we hypothesized that a change in health status would be associated with more desire for social contact with both friends and family, possibly as a reaction to loss of actual contact due to health constraints as well as due to the need for assistance. Finally, we expected that any decrease in contact, especially with friends, due to ill health would have a negative effect on sense of morale.

### Subjects

Subjects were 40 (35 female, 5 male) elderly community residents who were interviewed as part of a larger research project evaluating an emergency medical response system. All subjects ( $\bar{X}$  age = 77.20 years) were cognitively intact but medically frail and were interviewed twice over the period of one year. Demographic information on subjects at the first time of measurement is shown in Table 1.

Table 1  
Demographic Information on Subjects  
at First Measurement Point

	<u>Mean</u>	<u>Range</u>
Age (in years)	77.20	54 - 99
Number of Children	1.82	0 - 5
Number of Grandchildren	4.28	0 - 14
Number of Siblings	1.22	0 - 5

## Procedure

Testing was carried out in the subject's home. As part of the larger research project, subjects were administered a battery of questionnaires. Included in this battery were inventories concerned with amount of social contact engaged in with various individuals, whether the subject desired more contact, and several questions about the subject's rating of his/her health (Sherwood & Morris, 1981). Subjective health rating questions are included in Appendix A. The OARS Schedule of Illness (Pfeiffer, 1975) was administered as a measure of objective health rating. This inventory listed common health conditions and included a rating scale for each, thus providing measures both of the number of health conditions and of the degree of impairment caused by these illnesses. Morale was assessed with the Affect Balance scale (Bradburn, 1969).

## Results

Mean scores for subjective self-rating of health, peer-compared health, worries about health and number of health conditions are shown in Table 2.

Subjects' initial ratings of health ranged from poor to excellent. The majority of subjects (80%) rated their health as being fair to good when compared to the general population, with most subjects reporting their health to be fair. An additional 2.5% of subjects rated their health as excellent, the remaining 17.5% rated their health as poor. When comparing their health to a group of age peers, subjects reported health

**Table 2**  
**Comparison of Health Variables**  
**at Each Measurement Point**

	<u>Time 1</u>	<u>Time 2</u>
<b>Self-rated Health<sup>a</sup></b>		
excellent	2.5%	5.0%
good	42.5	37.5
fair	37.5	55.0
poor	17.5	2.5
$\bar{X}$ =	2.70(good)	2.45(good)
<b>Peer-compared Health<sup>a</sup></b>		
excellent	7.5	17.5 <sup>b</sup>
good	27.5	47.5
fair	45.0	17.5
poor	20.0	12.5
$\bar{X}$ =	2.22(good)	2.74(good)
<b>Health Worries<sup>a</sup></b>		
Not at all	40.0	27.5
very little	17.5	42.5
some	20.0	20.0
very much	22.5	10.0
$\bar{X}$ =	2.25(very little)	2.12(very little)
<b>Number Health Conditions</b>		
0	2.5	2.5
1	10.0	7.5
2	22.5	17.5
3	17.5	17.5
4	15.0	17.5
5	7.5	7.5
>5	18.9	20.0
$\bar{X}$ illnesses per subject	3.51	3.80

<sup>a</sup>For scoring see Appendix A

<sup>b</sup>Because of missing data, total does not sum to 100%



ratings similar to those on the earlier question, although more subjects reported being in fair to poor health compared to their peers than compared to the general population. On the OARS Schedule of Illness, subjects reported an average of 3.5 health conditions (range = 1 to 10). One year later subjects reported an average of 3.8 health conditions. Approximately 93% of subjects rated their health as being fair or good at the second time of measurement, with more subjects reporting their health to be fair. When comparing their health status to their peers, more subjects rated their health to be good at the second time of measurement than at the first (47.5% vs. 27.5% at Time 1). Thus, there was a tendency for subjects to report a slight improvement in subjective health status while the objective measure of health indicated a slight decrease in health status. However, despite this seeming contradiction, change in subjective health self-rating was minimal as was change in number of health conditions. In fact, comparisons between the two times of measurement via paired t-tests revealed no significant overall differences in any of the health ratings.

Correlations among health measures were also calculated. Concordance between measures would be indicated by a substantial negative correlation between self-rated health (where the highest rating indicated excellent health) and number of health conditions. At Time 1 self-rated health correlated  $r = .14$  (n.s.) with number of health conditions; at Time 2,  $r = -.39$  ( $p < .01$ ). Thus, at Time 2 evaluation of subjective and objective health was in greater agreement.

Table 3 presents information on frequency and type of actual contact and desire for more contact at each measurement point. The most frequent form of contact was via telephone calls with almost half of subjects reporting daily telephone contact with children and/or friends (40.0% and 45.0%, respectively). Daily face-to-face contact with children and/or friends happened for lesser numbers of subjects (22.5% and 30.0%). Letter writing was not a common form of social contact. Contact with grandchildren and siblings occurred less frequently across all forms of social contact measured. Similar frequencies of contact across type of contact were found at Time 2. Mean scores shown for total contact are sums across the three types. On the total contact variable, there was a significant difference between the first and second times of measurement ( $t = 2.39$ ,  $df = 39$ ,  $p < .05$ ).

We had hypothesized that a change in health status would be reflected in amount of social contact and desire for contact. An initial test of these predictions was conducted by correlating change on the health measures with the Time 2 social contact measures. Results, presented in Table 4, showed that changes in objectively and subjectively defined health status were associated with different contact patterns. Additionally, family and friends played different roles.

Specifically, as expected, subjects who showed a greater increase in number of health conditions (indexing objectively

**Comparison of Social Contact Variables**  
**at Each Measurement Point**

	<u>Actual Contact</u>							
	<u>T1</u>				<u>T2</u>			
Children	Face-to-Face	Phone	Letter	$\Sigma$	Face-to-Face	Phone	Letter	$\Sigma$
never (or not applicable)	15.0%	20.0	75.0		7.5	7.5	62.5	
several x/yr <sup>b</sup>	17.5	0.0	7.5		12.5	0.0	12.5	
monthly	22.5	7.5	7.5		17.5	5.0	5.0	
weekly	22.5	27.5	7.5		35.0	35.0	5.0	
daily	22.5	40.0	0.0		15.0	40.0	0.0	
$\bar{X} =$				9.30 (monthly)				9.5 (monthly)
Grandchild								
never (or not applicable)	20.0	20.0	77.5		12.5	15.0	60.0	
several x/yr	30.0	22.5	17.5		27.5	17.5	20.0	
monthly	30.0	22.5	5.0		30.0	25.0	2.5	
weekly	17.5	20.0	0.0		12.5	17.5	2.5	
daily	2.5	15.0	0.0		5.0	12.5	0.0	
$\bar{X} =$				6.42 (sev. x/yr.) <sup>b</sup>				6.25 (sev. x/yr.)
Sibling								
never (or not applicable)	60.0	47.5	85.0		12.5	5.0	40.0	
several x/yr	17.5	15.0	10.0		22.5	12.5	17.5	
monthly	10.0	10.0	2.5		10.0	10.0	0.0	
weekly	12.5	12.5	2.5		7.5	12.5	0.0	
daily	0.0	15.0	0.0		2.5	15.0	0.0	
$\bar{X} =$				4.08 (sev. x/yr.)				3.88 (sev. x/yr.)
Friend								
never	7.5	5.0	60.0		10.0	12.5	65.0	
several x/yr	10.0	10.0	32.5		15.0	5.0	20.0	
monthly	12.5	15.0	7.5		17.5	2.5	10.0	
weekly	37.5	25.0	0.0		25.0	32.5	5.0	
daily	30.0	45.0	0.0		30.0	47.5	0.0	
$\bar{X} =$				14.50 (monthly)				13.38 (monthly)
Total Contact				40.40 (monthly)				36.88 (monthly)

<sup>b</sup>several times a year

Table 3 (cont'd)  
Desire for More Contact

	<u>T1</u>	<u>T2</u>
Child		
yes	52.5%	37.5%
no	42.5%	45.0%
Grandchild		
yes	42.5%	45.0%
no	57.5%	37.5%
Sibling		
yes	40.0%	30.0%
no	57.5%	25.0%
Friend		
yes	52.5%	47.5%
no	47.5%	52.5%

<sup>a</sup>Because of missing data or the lack of a relative in a particular relationship category, totals may not add to 100%.

defined health status) reported having more contact at Time 2 with their children ( $r = .297$ ,  $p < .05$ ). There was no association between change in objective health status and desire for more contact with family members, nor was there any relationship between changes in subjective health rating and actual amount of contact or desired contact with children or other family members.

Social contact with friends covaried with health status in a complex fashion. Declines in subjective health rating were correlated with less actual contact ( $r = -3.43$ ,  $p < .05$ ) but with more desire for contact with friends at Time 2 ( $r = .284$ ,  $p < .05$ ). However, declines in objective health--indexed by number of health conditions and by greater self-rated degree of impairment due to those illnesses--correlated with less desire for contact with friends at Time 2 ( $r = -.457$ ,  $p < .005$ ;  $r = -.384$ ,  $p < .05$ , respectively).

We had further hypothesized that changes in social contact due to health would affect morale. The relationship between health status, contact patterns and morale is presented in Table 5. All measures of health status at Time 2 correlated with level of morale at Time 2 indicating that worse health status, whether objectively or subjectively defined, was associated with lower levels of morale. Interestingly, no measure of change in health status was related to morale although

Table 4  
Correlations Between Contact Variables  
and Health Status

	Objective:		Subjective:	
	<u>Change in # health conditions</u>	<u>Change in degree of impairment</u>	<u>Change in Self-ratings</u>	<u>Change in health worries</u>
Actual Contact				
Child	.297*	.183	-.211	-.156
Grandchild	.130	-.026	-.168	.192
Sibling	-.264	-.198	.160	-.150
Friend	.211	.139	-.343*	-.105
Desire for More Contact				
Child	.111	.033	-.019	.092
Grandchild	-.148	-.212	-.296	-.242
Sibling	-.129	-.070	-.065	-.008
Friend	-.457**	-.384*	.284*	-.127

\*p < .05

\*\*p < .005

Table 5  
Correlations Between Health Status  
Contact Patterns, and Morale

	<u>Morale</u>
Health Status at Time 2	
self-rated health	-.432**
peer-compared	-.343*
health worries	-.346*
number health conditions	-.468**
self-rated degree of impairment	-.383*
Change in Health Status	
change in # health conditions	.268
change in degree impairment	.136
change in subjective rating	.021
change in health worries	.162
Contact Patterns	
actual amount of contact	.616***
desire for more contact	-.309*

\*p < .05

\*\*p < .01

\*\*\*p < .001

there was a nonsignificant trend for an increase in number of health conditions to be related to lower morale ( $r = .268$ ,  $p < .07$ ).

Both actual amount of contact and desire for more contact were related to morale at the second time of measurement, with the relationships in the expected directions. Total amount of social contact correlated highly with morale ( $r = .616$ ,  $p < .001$ ) while total desire for additional contact correlated negatively with morale ( $r = -.309$ ,  $p < .05$ ).

#### Discussion

The hypothesized interaction of health status, social contact and morale was partially substantiated, although the relationship appears to be more involved than previously thought. Changes in objective and subjective health status were found to be associated with social contact patterns but not with levels of morale. This lack of association may be due to subjects' health conditions changing only slightly over the measurement period. Another possibility is that the effect of worsening objective health on morale is mediated by subjective perceptions of health status and by the ways in which health affects social contact. Our results suggested that change in health status may affect social contact patterns with friends primarily through individual interpretation of health status and satisfaction with contact patterns. Thus, the contradiction



between decreased desire for contact with friends when objective health status changes and increased desire for social contact when subjective health status changes may reflect the role of cognition in mediating illness behavior.

The present study lends support to the findings of Ward et al. (1983) that subjective quality of social relationships was important in determining level of morale. While the present study did not examine quality of social interactions, the findings of increased interaction with children following a worsening in the older adult's objective health condition coupled with no increase in desire for contact suggests that subjective evaluation of the quality of social contact may provide important information in better understanding this relationship. Additionally, changes in subjective health did not figure significantly in predicting contact with children. Thus, it appears that both objective and subjective components of social contact contribute to morale and that individual evaluation of the social contact may moderate this relationship, with subjective aspects playing a less influential role for family than for friends.

As Larson (1978) and Liang et al. (1980) have suggested, health status appears to contribute to individual well-being or morale. Further, results from the present study provide a basis for further exploration of how changes in health status may affect morale through changes in actual and desired social

contact. While the results of the analyses reported here are fairly consistent with what would be expected, their contribution lies in demonstrating the necessity for taking into account the complex effects of health in research on psychosocial processes of aging.

## References

- Bradburn, N.M. (1969). The structure of psychological well-being. Chicago: Aldine.
- Edwards, J.N. & Klemmack, D.L. (1973). Correlates of life satisfaction: A re-examination. Journal of Gerontology, 28, 497-502.
- Glenn, N.D. & McLanahan, S. (1981). The effects of offspring on the psychological well-being of older adults. Journal of Marriage & the Family, 43, 409-421.
- Larson, R. (1978). Thirty years of research on the subjective well-being of older Americans. Journal of Gerontology, 33, 109-125.
- Liang, J., Dvorkin, L., Kahana, E. & Mazian, F. (1980). Social integration & morale: A re-examination. Journal of Gerontology, 35, 746-757.
- Lowenthal, M.F. & Haven, C. (1968). Interaction & adaptation: Intimacy as a critical variable. American Sociology Review, 33, 20-30.
- Pfeiffer, E. (Ed.). (1975). Multidimensional functional assessment: The OARS methodology. Center for the Study of Aging and Human Development, Duke University, Durham, N.C.
- Shanas, E. (1979). Social myth as hypothesis: The case of family relations of old people. Gerontologist, 19, 3-9.

Sherwood, S. & Morris, J.N. (1981). A study of the effects of an emergency alarm and response system for the aged.

A final report. Grant # HS01788, NCHSR. (Executive summary available from Lifeline Systems, Inc., 1 Arsenal Market Place, Watertown, MA 02172.)

Treas, J. (1977). Family support systems for the aged: Some social & demographic considerations. Gerontologist, 17, 486-491.

Ward, R.A., Sherman, S.R. & La Gory, M. (1984). Subjective network assessments & subjective well-being. Journal of Gerontology, 39, 93-102.

## Appendix A

## Subjective Health Rating Questions

In general, how would you say your health is right now?<sup>a</sup>

- ☐ 1 = Poor
- ☐ 2 = Fair
- ☐ 3 = Good
- ☐ 4 = Excellent

Now, compared with other persons your age, how would you rate your physical health at the present time?<sup>a</sup>

- ☐ 1 = Poor
- ☐ 2 = Fair
- ☐ 3 = Good
- ☐ 4 = Excellent

How much do you worry about your health?

- ☐ 1 = Not at all
- ☐ 2 = Very little
- ☐ 3 = Some of the time
- ☐ 4 = Very much

<sup>a</sup>Questions about self-rated and peer-compared health were reversed for data analysis.